



#13 9/30/98
Bray
Docket No.: 46963

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Jeffrey M. Isner, et al.

EXAMINER: Gambel, P.

SERIAL NO.: 08/744,882

GROUP: 1642

FILED: November 8, 1996

FOR: METHODS FOR ENHANCING ANGIOGENESIS

Honorable Assistant Commissioner for Patents
Washington, D.C. 20231

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Sir:

AMENDMENT UNDER 37 CFR §1.111

Applicants respond to the Office Action of April 1, 1998, as follows:

REMARKS

Applicants acknowledge and appreciate the Examiner's withdrawal of the previous rejections under 35 U.S.C. §112, first and second paragraphs, 102 and 103.

Claims 1, 5, 6, 9, 10, 12-18 now stand rejected under 35 U.S.C. §103 as being unpatentable over Noishiki, et al. (*Nature Medicine* 1996) or Wilson, et al. (U.S. Patent No. 5,612,211) in view of Fennie (*Blood* 1995) or Schnuerch, et al. (*Development* 1993) or Yamaguchi, et al. (*Development* 1993) in further view of Shi, et al. (*J. Vasc. Surg.* 1994), Bikfalvi, et al., (*Leukemia* 1994) or Asahara, et al., (*Circulation* 1995).

Applicants respectfully disagree and request that this rejection be withdrawn for the following reasons.

The present invention is based on the surprising discovery by Applicants that isolated endothelial progenitors cells when administered distal by injection selectively migrate to sites of active angiogenesis or blood vessel injury and thus can be used in treatment of ischemia or for treating a blood vessel injury. See, page 4, lines 15-29 of the present specification. Thus, one can administer the progenitor cell intravenously at a site distant from the site desired for treatment. This is not in any way taught, suggested or obvious by the cited references.

The primary reference, Wilson, describes using FGF to stimulate growth, differentiation and culture of stem cells. As acknowledged by the Examiner, the